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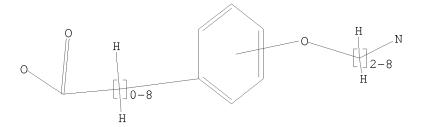
Uploading C:\Program Files\Stnexp\Queries\8893a.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 11:01:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2514382 TO ITERATE

38.0% PROCESSED 956360 ITERATIONS

1018 ANSWERS
1060 ANSWERS

39.8% PROCESSED 1000000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.24

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*
BATCH \*\*INCOMPLETE\*\*
PROJECTED ITERATIONS: 2514382 TO 2514382
PROJECTED ANSWERS: 2511 TO 2819

L2 1060 SEA SSS FUL L1

L3 135 L2

=> s 13 and py<2002 21986569 PY<2002 L4 9 L3 AND PY<2002

## => d 1-9 ibib abs hitstr

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:208799 CAPLUS

DOCUMENT NUMBER: 148:275678

TITLE: Vitronectin receptor antagonist pharmaceuticals INVENTOR(S): Rajopadhye, Milind; Barrett, John A.; Carpenter, Jr.,

Alan P.; Cheesman, Edward H.; Harris, Thomas D.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Pharma Company, USA

SOURCE: U.S., 133pp., Cont.-in-part of U.S. Ser. No. 466,588.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 7332149	B1	20080219	US 2000-599890	20000621	
US 6322770	В1	20011127	US 1999-281207	19990330	<
US 20020015680	A1	20020207	US 1999-281209	19990330	
US 6524553	B2	20030225			
US 6548663	B1	20030415	US 1999-281050	19990330	
US 6794518	B1	20040921	US 1999-466588	19991217	
US 20030124120	A1	20030703	US 2002-269252	20021011	
US 20030149262	A1	20030807	US 2002-306054	20021126	
US 20050154185	A1	20050714	US 2004-770380	20040202	
US 7321045	В2	20080122			
PRIORITY APPLN. INFO.:			US 1998-112829P	P 19981218	
			US 1999-466588	A2 19991217	
			US 1998-80150P	P 19980331	
			US 1998-112715P	P 19981218	
			US 1998-112732P	P 19981218	
			US 1998-112831P	P 19981218	
			US 1999-281050	A3 19990330	
			US 1999-281209	A3 19990330	

GΙ

AB The present invention describes novel compds. comprising at least one of a chemotherapeutic agent or a radiosensitizer agent, and further comprising a diagnostic or therapeutic metallopharmaceutical selected from defined 99mTc complexes, e.g., 99mTc(L)(tricine)(TPPTS) where L = diazenido derivative of polyfunctional benzenesulfonic acid I and TPPTS = tris(m-sulfophenyl)phosphine trisodium salt, or various indium, lutetium, yttrium or gadolinium polyfunctionalized DOTA-type complexes, e.g., indium complex II, useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The pharmaceuticals are thus comprised of a targeting moiety that binds to the vitronectin receptor that is expressed in tumor vasculature, an optional linking group, and a therapeutically effective radioisotope or

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

diagnostically effective imageable moiety. The present invention also provides novel compds. useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The present invention also provides novel compds. useful for imaging atherosclerosis, restenosis, cardiac ischemia, and myocardial reperfusion injury. The present invention also provides novel compds. useful for the treatment of rheumatoid arthritis. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an x-ray contrast agent, or an ultrasound contrast agent.

ΙT 1007219-80-8P 1007219-81-9P

> RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(vitronectin receptor antagonist metallopharmaceuticals as chemotherapeutic or radiosensitizer agents)

1007219-80-8 CAPLUS RM

CN 1H-Indazole-5-carboxylic acid, 7-[3-[[(1,1-

> dimethylethoxy)carbonyl]amino]propoxy]-1-(phenylmethyl)-, ethyl ester (CA INDEX NAME)

EtO-C
$$\begin{array}{c|c}
O \\
\parallel \\
N \\
N \\
CH_2-Ph
\end{array}$$

$$\begin{array}{c|c}
CH_2-Ph
\end{array}$$

1007219-81-9 CAPLUS RN

CN 1H-Indazole-5-carboxylic acid, 7-[3-[[(1,1dimethylethoxy)carbonyl]amino]propoxy]-1-[3-[[1-(triphenylmethyl)-1Himidazol-2-vl]amino[propvl]- (CA INDEX NAME)

THERE ARE 148 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: 148

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:20052 CAPLUS

64:20052 DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 64:3741b-g

TITLE: Aminoarylideneacetonitrile dyes

PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.

SOURCE: 16 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIN	D DATE	APPLICATION NO	. DATE
	NL 6500517		1965071	9 NL 1965-517	19650115 <
	BE 658426			BE	
	FR 1425609			FR	
):	RITY APPLN.	INFO.:		DE	19640117

PRIOF GΙ For diagram(s), see printed CA Issue. Greenish yellow dyes of the general formula I for polyester fabrics were AΒ prepared; in formula I, R is H or Me, R1 Et, Bu, or PhOCH2CH2, R2 = H or MeO2C, X = CN or CO2Et, and Y is CO2, OCO2, or O. Bu(HOCH2CH2)NPh (II) 19.3, C6H6 100, powdered K2CO3 13.8, present with p-MeO2CC6H4COC1 19.9 parts, and the product 35.5 parts, b0.6 230-5°, in 100 parts PhCl added dropwise at  $50-5^{\circ}$  to 30.7 parts POC13 and 14.6 parts HCONMe2 and stirred 12 hrs. at  $50-5^{\circ}$  yielded p-MeO2CC6H4CO2CH2CH2N(Br)C6H4CHO-p (III). III 38, NCCH2CO2Et 12, EtOH 20, and piperidine 1 part refluxed 2 hrs. yielded yellow I (R = H, R1 = Bu, R2 = p-MeO2C, X = CO2Et, Y = CO2), m.  $120-1^{\circ}$  (EtOH); it dyes polyester, polyamide, and triacetylcellulose fabrics greenish yellow shades of very good fastness properties. III with CH2(CN)2 gave similarly I (R = H, R1 = Bu, R2 = p-MeO2C, X = CN, Y = CO2), m.  $88-90^{\circ}$ . II (20.7 parts) treated with 19.9 parts p-MeO2CC6H4COCl and 11 parts Et3N at 80-100°, and the condensation product formylated yielded 2,4-Me[p-MeO2CC6H4CO2CH2CH2N(Bu)]C6H3CHO; a 40-part portion in 100 cc. Et3N with 7 parts CH2(CN)2 in BuOH yielded greenish yellow I (R = Me, R1 = Bu, R2 = MeO2C, X = CN, Y = CO2), m.  $112-14^{\circ}$  (EtOH).  $\text{Et}(\text{HOCH2CH2})\,\text{NPh}$  condensed with o-MeO2CC6H4COCl and then formylated, and the resulting 2,4-Me[o-MeO2CC6H4CO2CH2CH2N(Et)]C6H3CHO treated with CH2(CN)2 yielded I (R = Me, R1 = Et, R2 = o-MeO2C, X = CN, Y = CO2),  $m. 100-1^{\circ}$ . 3-Mederivative of II condensed with p-ClCO2C6H4CO2Me, and the product heated to  $150-200^{\circ}$ , distilled (b0.5-0.6  $198-207^{\circ}$ ), and then formylated with POCl3-HCONMe2 gave 2,4-Me[p-Me02CC6H4OCH2CH2N(Bu)]C6H3CHO, b1.6  $279-80^{\circ}$ , which with CH2(CN)2 yielded I (R = Me, R1 = Bu, R2 = p-MeO2C, X = CN, Y = O), m.  $84-7^{\circ}$ . m-MeC6H4N(CH2CH2Cl)Et (IV) 59.5, HCONMe2 100, and PhONa 34.8 parts gave m-McC6H4N(CH2CH2OPh)Et, b0.8 155-63°, which formylated and condensed with NCCH2CO2Et yielded I (R = Me, R1 = Et, R2 = H, X = CO2Et, Y = O), m. 74-5°. IV 59.8, HCONMe2 357, and p-MeO2CC6H4CO2K 72.5 parts heated 7 hrs. at 140°, concentrated, and treated with 95 parts POC13 yielded 2,4-Me[p-MeO2CC6H4CO2CH2CH2N(Et)]C6H3CHO, m. 77-80°, which condensed with CH2(CN)2 yielded I (R = Me, R1 = Et, R2 = p-EtO2C, X = CN, Y = CO2), m. 136-8°. m-MeC6H2N(CH2CH2OH)Et 71.5 with ClCO2Ph 69.0 and Et3N 44.5 parts gave m-MeC6H3N(CH2CH2OCO2Ph)Et which formylated and condensed with CH2(CN)2 yielded I (R = Me, R1 = Et, R2 = H, X = CN, Y = OCO2). m-MeC6H4(CH2CH2C1)2 23.2, NaOPh 24, and (MeOCH2CH2)20 50 parts refluxed 1-2 hrs., and the product formylated gave 2,4-Me[(PhOCH2CH2)2N]C6H3CHO, m. 82-4° (EtOH), which condensed with

CH2(CN)2 yielded I (R = Me, R1 = PhOCH2CH2, R2 = H, X = CN, Y = O); it dyes greenish yellow shades.

IT 1081794-87-7P

RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation) (Aminoarylideneacetonitrile dyes)

RN 1081794-87-7 CAPLUS

CN Benzoic acid, 4-[2-[butyl(4-formyl-3-methylphenyl)amino]ethoxy]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} O & \text{Me} \\ \text{MeO-C} & \text{N-Bu} \\ \hline O-\text{CH}_2-\text{CH}_2-\text{N} \end{array}$$

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:408695 CAPLUS

DOCUMENT NUMBER: 59:8695

ORIGINAL REFERENCE NO.: 59:1531d-h, 1532a-d

TITLE: Quaternary ammonium salts from tertiary

2-phenoxyethylamines

INVENTOR(S): Copp, Frederick C.; Elphick, Albert R.; Coker,

Geoffrey G.

PATENT ASSIGNEE(S): Wellcome Foundation Ltd.

SOURCE: 13 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 919126		19630220	GB	19580701 <
PRIORITY APPLN. INFO.:			GB	19580701

GI For diagram(s), see printed CA Issue.

AB (Phenoxyalkyl)dialkylamines are treated with alkyl halides to give I and II, where R and R1 are Me or Et, R2 and R3 are H, halogen, MeO, or Me, Y is NO2, C1, an alkyl, or an alkoxy group, Z is a C1-3 alkoxy group, and X is iodine or Br; I and II can be used as depressants for the peripheral sympathetic nervous system. Thus, 136 g.

4-hydroxy-3,5-dimethylbenzophenone is added to a solution of 13.8 g. Na in 950 mL. hot EtOH, 136 g. BrCH2CH2Br added, the mixture refluxed 7 h.,
.apprx.700 mL. EtOH evaporated in vacuo, the residue poured into 500 mL. H2O, the oil that sep. extracted with Et2O, the extract washed with 5N NaOH, the

evaporated, and the residue distilled to give 2-(4-benzoyl-2,6-dimethylphenoxy)ethyl bromide (III), b0.01 182-6°, m.p. 76°. A mixture of 16.7 g. III and 50 g. 25% Me2NH(MeOH) is heated in a sealed tube at 100° 6 h., the mixture evaporated, excess 5N NaOH added to the residue, the oil that sep. extracted with Et2O, the Et2O evaporated, and the residue distilled to give 1-(4-benzoyl-2,6-dimethylphenoxy)-2-dimethylaminoethane (IV), b0.001

ΙT

RN CN

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162-7^{\circ}. MeI (4 g.) is added to a solution of 4 g. IV in Me2CO, the
mixture kept 1 h., refluxed 30 min., and cooled to give
N-[2-(4-benzoy1-2,6-dimethylphenoxy)ethyl]-N,N,N-trimethylammonium iodide,
m. 208-9° (EtOH). Similarly prepared are I (Y, R2, R3, R, R1, X,
m.p. given): H, Me, Me, Me, Et, iodine, 185-6° (EtOH); H, Me, Me,
Me, Me, Br, 204-5° (iso-PrOH); p-Me, Me, Me, Me, Br
(hemihydrate), 216-17° (EtOH-iso-PrOH); m-Me, Me, Me, Me, Br,
221°; o-C1, Me, Me, Me, Me, Br, 204-5°; m-C1, Me, Me, Me,
Me, Br, 203-4°; p-Cl, Me, Me, Me, Br, 226-7°; o-MeO, Me,
Me, Me, Me, Br, 216-17°; m-MeO, Me, Me, Me, Me, Br, 176-8°;
p-MeO, Me, Me, Me, Me, Br, 189-90°; p-EtO, Me, Me, Me, Me, Br,
203°; p-NO2: Me, Me, Me, Br, 240-1°; H, Cl, Cl, Me, Me,
Br, 186°, H, H, H, Me, Me, Br, 196-7°; p-NH2, Me, Me, Me,
Me, iodine, 239-41°; H, H, Br, Me, Me, iodine, 209-10°
(MeOH); H, H, Br, Me, Et, iodine, 165-6°; H, H, Cl, Me, Me, Br,
199-200° (iso-PrOH-Et2O); H, H, F, Me, Me, iodine, 227-80°;
H, H, F, Me, Et, iodine (hemihydrate), 211-12°; H, Br, Me, Me, Me,
iodine, 178-9° (EtOH-iso-PrOH); H, Me, Et, Me, Et, iodine,
221-2°; H, Me, Me, Me, HO(CH2)2, iodine, 160-1° (EtOH); H, Me, Me, HO(CH2)2, HO(CH2)2, iodine, 110-11°; H, Me, Me, Et, Et,
iodine, 149-50° (EtOH); H, H, MeO, Me, Me, iodine, 189-90°
(EtOH-ether); H, Me, Me, Me, Me, Cl (hydrate), 209°
(iso-PrOH-Et20); and H, Me, Me, Me, Me, MeSO4, 138-9° (EtOH-EtOAc).
Similarly prepared are II (Z, R2, R3, R, R1, X, m.p. given): Me, Me, Me, Me,
Me, iodine, 182-3^{\circ} (EtOH); Et, Me, Me, Me, iodine,
181-2° (EtOH); Et, Me, Me, Me, Et, Br, 109-11°
(iso-PrOH-Et2O); PhCH2, Me, Me, Me, Br, 148-50° (iso-PrOH);
EtO, H, H, Me, Me, iodine, 157-60° (EtOAc-EtOH); MeO, H, H, Me, Me,
iodine, 205-7° (Me2CO-EtOAc); MeO, Me, H, Me, Me, iodine,
149-51^{\circ} (EtOH-EtOAc); MeO, Me, Me, Me, Me, iodine, 213-15^{\circ}
(EtOH-EtOAc); EtO, H, H, Et, Et, iodine, 128° (EtOH-EtOAc); EtO,
Me, H, Me, Me, iodine, 163-5° (EtOH-EtOAc); iso-PrO, Me, Me, Me,
Me, iodine, 186-7^{\circ} (iso-PrOH); MeO, MeO, H, Me, Me, iodine
181-4° (EtOH); EtO, MeO, H, Me, Me, iodine, 136-8° (EtOH);
EtO, MeO, MeO, Me, Me, iodine, 208-10° (EtOH); MeO, Br, H, Me, Me,
iodine, 196-9° (EtOH); MeO, Br, H, Me, Et, iodine, 186-9°
(EtOH); EtO, Br, H, Me, Me, iodine, 184-5° (iso-PrOH); EtO, Br, H,
Me, Et, iodine, 121-4^{\circ} (iso-PrOH); and EtO, Me, Me, Me, Me, iodine,
177-9° (EtOH-EtOAc). Also prepared are (m.p. given)
N-[3-(4-benzoyl-2,6-dimethylphenoxy)propyl]-N,N,N-trimethylammonium
bromide, 160-1^{\circ}; N-[2-(4-benzoyl-2,6-dimethylphenoxy)-1-
methylethyl]-N,N,N-trimethylammonium iodide, 215-16° (EtOH);
N-[2-(4-benzoyl-2,6-dimethylphenoxy)-2-methylethyl]-N,N,N-
trimethylammonium iodide, 167° (EtOH);
N-[2-(4-benzoyl-3-hydroxyphenoxy)ethyl]-N, N, N-trimethylammonium iodide,
139-40° (EtOH); N-[2-(4-acetamido-2,6-dimethylphenoxy)ethyl]-N,N,N-
trimethylammonium iodide, 242-4° (MeOH); and
N-[2-(4-propionylamino-2,6-dimethylphenoxy)ethyl]-N,N,N-trimethylammonium
iodide, 197-9^{\circ} (EtOH).
875831-55-3P, Benzoic acid,
4-[2-(dimethylamino)ethoxy]-3,5-dimethoxy-, isopropyl ester
RL: PREP (Preparation)
   (preparation of)
875831-55-3 CAPLUS
Benzoic acid, 4-[2-(dimethylamino)ethoxy]-3,5-dimethoxy-, 1-methylethyl
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TOh 29/12/2008

ester (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{C-OPr-i} \\ \\ \text{Me}_2 \text{N-CH}_2 \text{-CH}_2 \text{-O} \\ \\ \text{OMe} \end{array}$$

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:408694 CAPLUS

DOCUMENT NUMBER: 59:8694
ORIGINAL REFERENCE NO.: 59:1531c-d

TITLE: Catalytic reduction of haloaromatic nitro compounds to

haloaromatic amines

INVENTOR(S): Dietzler, Andrew J.; Keil, Theodore R.

PATENT ASSIGNEE(S): Dow Chemical Co.

SOURCE: 3 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3067253		19621204	US 1958-746334	19580703 <
PRIO	RITY APPLN. INFO.:			US	19580703
AB	Good yields of halo	aromati	c amines are	obtained from the cat	talytic

- AB Good yields of haloaromatic amines are obtained from the catalytic hydrogenation of haloaromatic nitro compds. in the presence of 0.1-0.3 g. Ca(OH)2 per g. Raney Ni catalyst. Thus, the following redns. were carried out: m-BrC6H4NO2 to m-BrC6H4NH2, 83-7%; 4,3-Br(O2N)C6H3Ph to 4,3-Br(H2N)C6H3Ph, 86.3%; 3,4-Br(O2N)C6H3OH to 3,4-Br(H2N)C6H3OH, 72.9%; 3,4-Cl2C6H3NO2 to 3,4-Cl2C6H3NH2, 91.3%; and 2,5-Br2C6H3NO2 to 2,5-Br2C6H3NH2, 88.5%. CaCO3, Ca(OAc)2, Mg(OH)2, NaOAc, or Na2CO3 may be used in place of Ca(OH)2.
- IT 875831-55-3P, Benzoic acid,

4-[2-(dimethylamino)ethoxy]-3,5-dimethoxy-, isopropyl ester

RN 875831-55-3 CAPLUS

CN Benzoic acid, 4-[2-(dimethylamino)ethoxy]-3,5-dimethoxy-, 1-methylethyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{C-OPr-i} \\ \text{Me}_2 \text{N-CH}_2 - \text{CH}_2 - \text{O} \\ \text{OMe} \end{array}$$

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ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
L4
ACCESSION NUMBER: 1954:28918 CAPLUS
DOCUMENT NUMBER:
                        48:28918
ORIGINAL REFERENCE NO.: 48:5219h-i,5220a-c
                        Quaternary ammonium salts of tertiary aminoalkyl
TITLE:
                        2-(tertiary aminoalkoxy)-4-substituted-benzoates
INVENTOR(S):
                        Clinton, Raymond O.; Laskowski, Stanley C.
PATENT ASSIGNEE(S):
                        Sterling Drug Inc.
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO. KIND DATE APPLICATION NO.
                       ---- 19530616 US 1951-245249 19510905 <--
     US 2642435
    Preparation and properties are described for series of compds. having 2
AB
     quaternary ammonium groups, which have ganglionic blocking activity.
     Thus, 2-(tertiaryaminoalkoxy)-4-nitrobenzoic acids are heated in refluxing
     EtOH or PrOH with a tertiary-aminoalkyl halide to yield tertiary
     aminoalkyl 2-(tertiary aminoalkoxy)-4-nitrobenzoates. These are reacted
     with 2 equivalent of MeI to form the corresponding dibasic quaternary ammonium
     salts. The nitro groups are then reduced by catalytic hydrogenation.
     Thus, 15.9 g. of 2-(2-diethylaminoethoxy)-4-nitrobenzoic acid-HCl, 8.1 g.
     Et2NCH2CH2Cl, and 200 ml. iso-PrOH are refluxed 7 hrs. and allowed to
     stand overnight. Purification yielded a straw-colored oil,
     2-diethylaminoethyl 2-(2-diethylaminoethoxy)-4-nitrobenzoate (I) (di-HCl
     salt, m. 193-3.9^{\circ}). To a solution of 4.8 g. of I in 125 ml. of EtOAc
     was added 20 ml. of MeI at room temperature After standing overnight,
precipitate was
     removed, washed, and recrystd. from absolute alc. to yield the dimethiodide
     (II) of I. II was reduced with H under reduced pressure at 50^{\circ} in
     absolute alc. to give 2-diethylaminoethyl
     2-(2-diethylaminoethoxy)-4-aminobenzoate-MeI, m. 210.5-11.9°.
     Similar preparation is described for 3-piperidinopropyl
     2-(2-diethylaminoethoxy)-4-nitrobenzoate-2HCl, m. 214.4-15.2°;
     2-morpholinoethyl 2-(2-diethylaminoethoxy)-4-nitrobenzoate-2HCl, m.
     217-18°; 3-piperidinopropyl
     2-(3-piperidinolpropoxy)-4-nitrobenzoate-2HCl, m. 213-14.1 (di-MeI, m.
     203.6-4.2); 3-piperidinopropyl 2-(2-diethylaminoethoxy)-4-nitrobenzoate-
     2MeI, m. 113.4-15.5; 2-(2-methylpiperidinoethyl
     2-(2-diethylaminoethoxy)-4-nitrobenzoate-2MeI, m. 201.1-2.9. All m.ps.
     are corrected Cf. preceding abstract
     878796-24-8, Ammonium, [2-(2-carboxy-5-
ΙT
     nitrophenoxy)ethyl]diethylmethyl-, iodide
        (esters)
RN
     878796-24-8 CAPLUS
CN
     Ethanaminium, 2-(2-carboxy-5-nitrophenoxy)-N, N-diethyl-N-methyl-, iodide
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TOh 29/12/2008

(1:1) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Et-N+} \text{CH}_2\text{-CH}_2\text{-O} \\ \text{Et} \\ \text{O}_2\text{N} \end{array}$$

• I-

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1954:28917 CAPLUS

DOCUMENT NUMBER: 48:28917 ORIGINAL REFERENCE NO.: 48:5219b-h

TITLE: Quaternary ammonium salts of lower alkyl 2-(tertiary

aminoalkoxy)-4-substituted-benzoates

INVENTOR(S): Clinton, Raymond O.; Laskowski, Stanley C.

PATENT ASSIGNEE(S): Sterling Drug Inc.

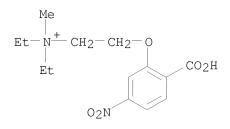
DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

US 2642434  19530616  US 1951-245248  19510905 < AB The preparation of a series of quaternary ammonium compds. having ganglionic-blocking activity (cf. C.A. 46, 6108e; 44, 6403b) is described that the first of the		PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
analog (III); III.HCl, m. 134-5° (from Me2CO-EtOAc); III.2HCl, m. 173.6-3.9° (from absolute alcEtOAc); III.H3PO4, m. 168.7-9.6° (from 95% alc.). To 6 g. II in 50 ml. of EtOAc was added 15 ml. MeI, the solution refluxed 1.5 hrs., cooled, and the product filtered and washed EtOAc; the II.MeI m. 143.1-4.6° (from iso-PrOH), was reduced by H and Pt at room temperature to III.MeI (IV) m. 139.2-41.1°. IV 10, PrCHC 5, PtO2 0.5 g. and 150 ml. absolute alc. treated at 50° with H under an unspecified pressure yielded Et 2-(2-diethylaminoethoxy)-4- (butylamino)benzoate-MeI. The following compds. having the general formula 3,4-RR1N(CH2)nO(R2O2C)C6H3NO2 are reported (n, R,R1,R2, salt, ar m.p. of salt, resp., given): 2, Me, Me, Et, MeI, 190.2-1.2°; 2, Et, Et, Pr, HCl, 153.4-5.4° (MeI, 143.2-4.6°); 3, Et, Et, Et, HCl, 164.8-5.6° (MeI, 148-9.6°); 2, (NRR1 =) piperidino, Et, HCl 191-1.5° (MeI, 147.7-8.9°); 2, (NRR1 =) 2-methylpiperidino, Et, HCl 180.8-2.6° (MeI, 159.8-61.0°); 3, (NRR1 =) 2-methylpiperidino, Et, HCl, 158.2-9.6° (MeI	AB	US 2642434  The preparation of ganglionic-blocking Thus, to 42.2 g. 4, added 4.6 g. Na in more I added after in ice, filtered, the dissolved in 500 ml to yield Et 2-(2-di 144.4-5.2° (yield 4 analog (III); III.H 173.6-3.9° (from ak (from 95% alc.). Solution refluxed 1 EtOAc; the II.MeI mand Pt at room temp 5, PtO2 0.5 g. and unspecified pressur (butylamino) benzoat formula 3,4-RR1N(CF m.p. of salt, resp. Et, Pr, HCl, 153.4-HCl, 164.8-5.6° (MeHCl 191-1.5° (MeI, 2-methylpiperidino,	a serie g activi 2-02N(F 500 ml. 3 hrs., the filt L. EtoActiethylam 45.5 g.) HCl, m. cosolute To 6 g. L. 5 hrs. m. 143.1 cerature 150 ml. ce yield te-MeI. H2) nO(R2., giver 5.4° (MeI, 148-147.7-8, Et, HC	19530616 es of quaterr ty (cf. C.A.  10) C6H3CO2Et absolute al refluxing of rate evapora c, filtered, ninoethoxy) -4 . II with S 134-5° (from alcEtOAc); II in 50 ml. , cooled, ar -4.6° (from e to III.MeI absolute al led Et 2-(2-c The followid 202C) C6H3NO2 a): 2, Me, Me 19.6°); 2, (NE 180.8-2.6°	US 1951-245248 hary ammonium compds. h 46, 6108e; 44, 6403b) in 1 l. refluxing abso lc., then 27.1 g. Et2NC continued 0.5 hr., the ated to dryness in vacu and the filtrate evapo 4-nitrobenzoate (II); H 6n and HCl gave the 4-at m Me2CO-EtOAc); III.2HC continued 15 nd the product filtered is III.H3PO4, m. 168.7-9 of EtOAc was added 15 nd the product filtered iso-PrOH), was reduced (IV) m. 139.2-41.1°. lc. treated at 50° with diethylaminoethoxy)-4- lng compds. having the are reported (n, R,R1, e, Et, MeI, 190.2-1.2°; lc°); 3, Et, Et, Et, IRR1 =) piperidino, Et, RR1 =) (MeI, 159.8-61.0°);	19510905 < aving is described. lute alc. was H2CH2Cl (I). 5 g mixture cooled o, the residue rated to dryness Cl salt, m. mino l, m6° ml. MeI, the and washed with by H IV 10, PrCHO H under an general R2, salt, and

 $165.5-6.5^{\circ}$ ); 2, (NRR1 =) 2,6-dimethylpiperidino, Et, HCl  $153-4^{\circ}$  (MeI,  $192.3-2.9^{\circ}$ ); 2, (NRR1 =) morpholino, Et, HCl, 207-8°. (MeI, m. 190.5-1.3°); 3, (NRR1 =) morpholino, Et, HCl 142-4.6° (MeI, 161.1-1.7°); 2, Et, Et, Me, HCl, 156.9-9.2° (MeI, 162.5-3.0°); 2, (NRR1 =) morpholino, Me,  $HCl, 206-6.4^{\circ}$ , (MeI 209-11°). The following compds. having the general formula 3,4-RR1N(CH2)nO(R2O2C)C6H3NH2 are reported: 2, Et, Et, Me, MeI, m. 127.4-9.0°; 2, Et, Et, Pr, mono-H3PO4, 153-4° (MeI m. 127.4-9.6°); 3, Et, Et, Et, H3PO4 151.5-3.2°, (MeI, m.  $125-6^{\circ}$ ); 2, (NRR1 =) piperidino, Et, H3PO4,  $220.8-1.4^{\circ}$ (MeI,  $167.4-8.4^{\circ}$ ; free base m. 107.3-8.5); 2, (NRR1 =) 2-methylpiperidino, Et, 91.2-2.4°; 2, (NRR1 =) 2,6-dimethylpiperidino, Et,  $H3PO4\ 211-11.8^{\circ}$  (MeI 123.4-6.4°); 3, (NRR1 =) 2-methylpiperidino, Et, 112.4-3.5°  $(H3PO4, 136.4-8.3^{\circ}); 2, (NRR1 = ) morpholino, Et, 98-9.8^{\circ}$ (H3PO4, 196.3-6.9°; MeI 182.7-3.7°); 3, (NRR1 =) morpholino, Et, H3PO4, 143.4-4.4° (free base, m. 106.8-8.0°; MeI, 151.9-3.1°); 2, Me, Me, Et, H3PO4, 176.3-7.3° (MeI, 127.4-9.6°). Also reported is the preparation of Et 2-(2-chloroethoxy)-4-nitrobenzoate, m. 56.6-7.2°; Et 2-(2-diethylaminoethoxy)-4-(butylamino)benzoate-HCl, m. 160.5-1.8°. All m. ps. are corrected 878796-24-8, Ammonium, [2-(2-carboxy-5-ΙT nitrophenoxy)ethyl]diethylmethyl-, iodide (esters) RN 878796-24-8 CAPLUS CN Ethanaminium, 2-(2-carboxy-5-nitrophenoxy)-N, N-diethyl-N-methyl-, iodide (1:1) (CA INDEX NAME)



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L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1938:41768 CAPLUS

DOCUMENT NUMBER: 32:41768
ORIGINAL REFERENCE NO.: 32:5807a-c

TITLE: Amino ethers of phenolic benzoic esters

AUTHOR(S): Rohmann, C.; Koch, A.

SOURCE: Archiv der Pharmazie und Berichte der Deutschen

Pharmazeutischen Gesellschaft (1938), 276,

154-64

CODEN: APBDAJ; ISSN: 0376-0367

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C. A. 30, 4160.7. In the present study the carboxy group of p-HOC6H4CO2H has been esterified with different alcs., while the HO group was etherified with Et2NCH2CH2OH. The alkaline ethers thus carry a tertiary N radical. This ever-present group stands in the p-position to a varying ester group. This arrangement conditions the local anesthetic action. With the aid of the organoleptic test, it was found that all the compds. prepared were more or less locally anesthetic. The change in activity, since the ether group remained constant, must therefore depend on the variation of the alkyl radical in the ester group. All the compds. were tested along with novocaine, tutocaine, cocaine and pantocaine with respect to their physicochem. properties, and the results obtained herein reported. Among the alkyl p-diethylaminoethoxybenzoate-HCl prepared were: Et, m. 154°; Pr, m. 103°; iso-Pr m. 146°; Bu m.

74°; iso-Bu m. 92°; allyl, m. 176-7°.

IT 1071582-57-4P

RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation) (Amino ethers of phenolic benzoic esters)

RN 1071582-57-4 CAPLUS

$$\begin{array}{c} \text{O} \\ \text{C-OPr-i} \\ \text{Et}_2 \text{N-CH}_2 \text{-CH}_2 \text{-O} \end{array}$$

● HCl

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1934:60903 CAPLUS

DOCUMENT NUMBER: 28:60903

ORIGINAL REFERENCE NO.: 28:7429h-i,7430a-b

TITLE: Dialkylaminoalkyl esters of hydroxy-3-carboxybiphenyls

INVENTOR(S): Christiansen, Walter G.; Harvey, Adelbert W.

PATENT ASSIGNEE(S): E. R. Squibb & Sons

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

AB Compds. (suitable for use as local anesthetics in solution buffered with a phosphate) such as the dialkylaminoalkyl esters of 3 - carboxy - 4 - hydroxybiphenyl and 3 - carboxy - 2-hydroxybiphenyl and salts thereof, particularly  $3-\beta$ -diethylaminocarbethoxy-4-hydroxybiphenyl and its

salts are prepared by converting the hydroxy-3-carboxybiphenyl to a salt, forming a halide ester, preferably a bromoalkyl ester from the salt and then forming the dialkylaminoalkyl ester from this. Purification of the 3- $\beta$ -diethylaminocarbethoxy-4-hydroxybiphenyl hydrochloride may be accomplished by crystallization from absolute EtOH. The product, in the form

hydrochloride, is a white crystalline substance soluble in water, m.  $167-168.5^{\circ}$ . The free ester is an almost colorless oil. Starting with 3-carboxy-2-hydroxybiphenyl and employing similar reactions, corresponding alkyl derivs. may be formed in which the hydroxy group is in the 2- instead of the 4-position.

IT 873986-35-7, Benzoic acid, 2-( $\gamma$ -dibutylaminopropoxy)-5-phenyl-,  $\gamma$ -dibutylaminopropyl ester (and salts)

RN 873986-35-7 CAPLUS

CN [1,1'-Biphenyl]-3-carboxylic acid, 4-[3-(dibutylamino)propoxy]-, 3-(dibutylamino)propyl ester (CA INDEX NAME)

L4 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1934:60902 CAPLUS DOCUMENT NUMBER: 28:60902

DOCUMENT NUMBER: 28:60902 ORIGINAL REFERENCE NO.: 28:7429g-h

TITLE: Dialkylaminoalkyl esters of

dialkylaminoalkoxy-3-carboxybiphenyl INVENTOR(S): Christiansen, Walter G.; Braker, William

PATENT ASSIGNEE(S): E. R. Squibb & Sons

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

AB Compds. (suitable for use in the preparation of local anesthetics) such as  $3-\beta-{\rm diethylaminocarbethoxy-}4-\beta-{\rm diethylaminoethoxybiphenyl}$  and  $3-\gamma-{\rm dibutylaminocarbopropoxy}$  - 4 -  $\gamma$  - dibutylaminopropoxybiphenyl are prepared from a hydroxy-3-carboxybiphenyl by forming its di-Na derivative and then replacing the Na atoms by dialkylaminoalkyl radicals (various details for preparing these compds. and their hydrochlorides and borates being given).

IT 873986-35-7, Benzoic acid,

 $2-(\gamma-\text{dibutylaminopropoxy})-5-\text{phenyl-}, \gamma-\text{dibutylaminopropyl}$ 

ester

(and salts)

RN 873986-35-7 CAPLUS

CN [1,1'-Biphenyl]-3-carboxylic acid, 4-[3-(dibutylamino)propoxy]-, 3-(dibutylamino)propyl ester (CA INDEX NAME)

$$(n-Bu)_2N-(CH_2)_3-O$$
  $C-O-(CH_2)_3-N(Bu-n)_2$